

TRAFFIC DEMAND MANAGEMENT MEASURES

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SUMMARY OF PRESENTATION

- **Traffic Demand Management (TDM) Overview**
 - **Definition (Comparison between Australia and UK)**
 - **Supply and Demand Measures (Australia)**
- **Private Non-Residential Parking Levies (PNRPLs)**
 - **Definition**
 - **Case Studies**
 - **Opportunities for Improvement (Australia)**
- **Group Discussion: What do you think about implementing PNRPLs in Scottish Cities?**

Some Background Ideas

- **Geography, Management of Scheme, Legality**

TRAFFIC DEMAND MANAGEMENT OVERVIEW

Experiences from Perth, Australia

DEFINITIONS

- Definition (Perth, Australia)

- *“Travel demand management is a valuable option to alleviate the effects of increased congestion in transport networks and maintain an efficient urban transport system”.*

- Definition (UK)

- *“In urban areas there continues to be an increase in traffic problems due to a significant rise in car ownership and peoples increasing mobility”.*
- *“Due to the increasing traffic problem engineers and practitioners have devised that only way to improve the situation is to introduce Transport Demand Management (TDM) measures, instead of always building new road infrastructure”.*

TRAFFIC DEMAND MANAGEMENT MATRIX

Pricing Measures

Road Pricing
Public Transport Fare Structure
Parking Pricing

Innovative Measures:

Park And Ride
Carpooling
Dial And Ride
Card Operating Car

Regulatory Measures:

Access Control
Parking Management
Traffic Calming Zones
Pedestrianisation

Supplementary Measures:

Hov Lanes
Variable Message Signage
Ramp Metering

PERTH, AUSTRALIA, DEMAND MANAGEMENT APPROACHES LAND USE PLANNING

- Population Growth
 - 1.65 Million 2010
 - 2.2 Million 2031
 - 3.5 Million 2050
- Land Use Planning
 - Small City Centre; and
 - Most of growth around suburbs hence activity centres.
- Transport Effects
 - Increase private car travel (Pollution);
 - Limited public transport;
 - Increased travel time;
 - Traffic congestion;
 - Higher private transport costs to households as well as reduced leisure time;
 - Declining community health; and
 - Increasing obesity as walking and riding become less practical.



PERTH, AUSTRALIA, DEMAND MANAGEMENT APPROACHES PROVIDE AN ACTIVE TRANSPORT NETWORK

- **Non-Roading (Rail, Bus, LRT, Cycling/Walking)**
- **Key Strategic Plans**
 - **Public Transport Plan (CBD and Key Outlying Centres);**
 - **Moving People Plan (Smart Roads);**
 - **Cycling Plan; and**
 - **Freight Plan (Metropolitan and Regional).**



PERTH, AUSTRALIA, DEMAND MANAGEMENT OTHER APPROACHES

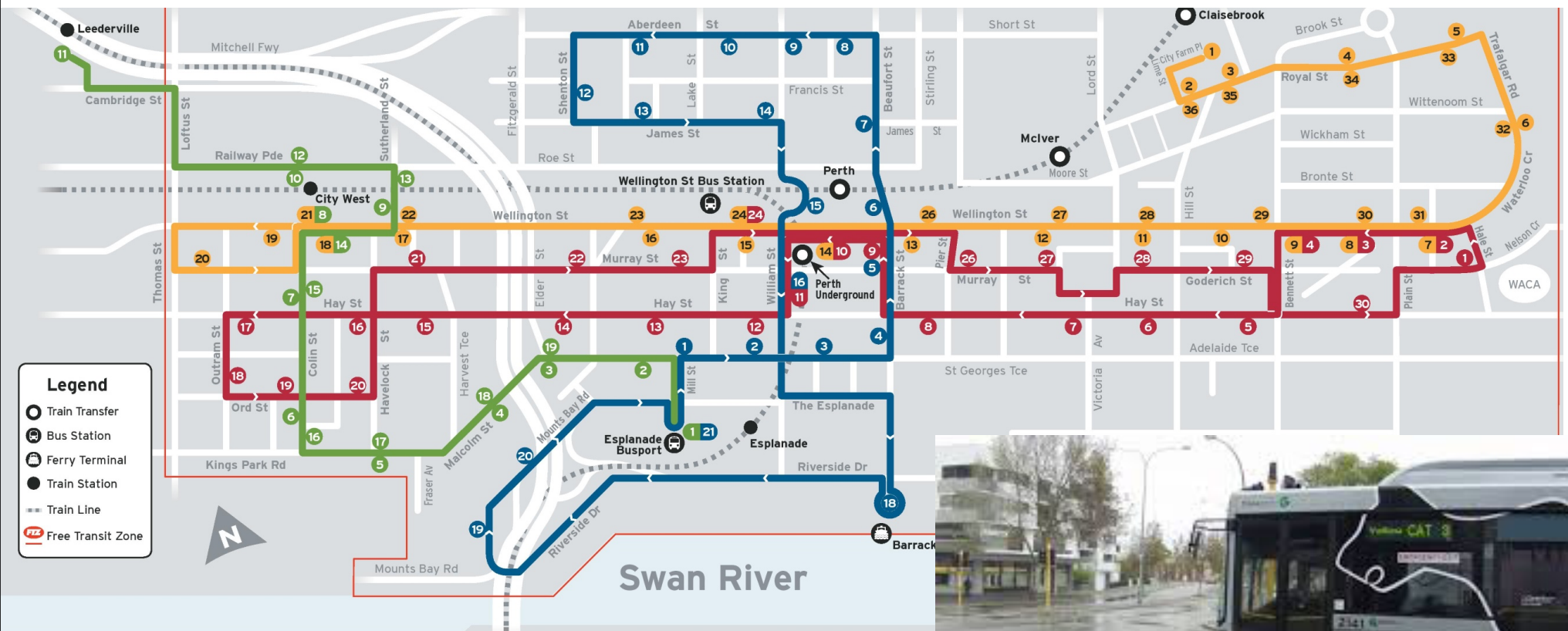
- Limiting single occupancy vehicle (SOV) opportunities;
- Through parking management (PNRPLs);
- Road pricing; and
- Voluntary travel behaviour change (VTBC) programs.

PERTH, AUSTRALIA, SUPPLY SIDE APPROACHES INVESTMENT IN PUBLIC TRANSPORT

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PERTH, AUSTRALIA, SUPPLY SIDE APPROACHES INVESTMENT IN PUBLIC TRANSPORT

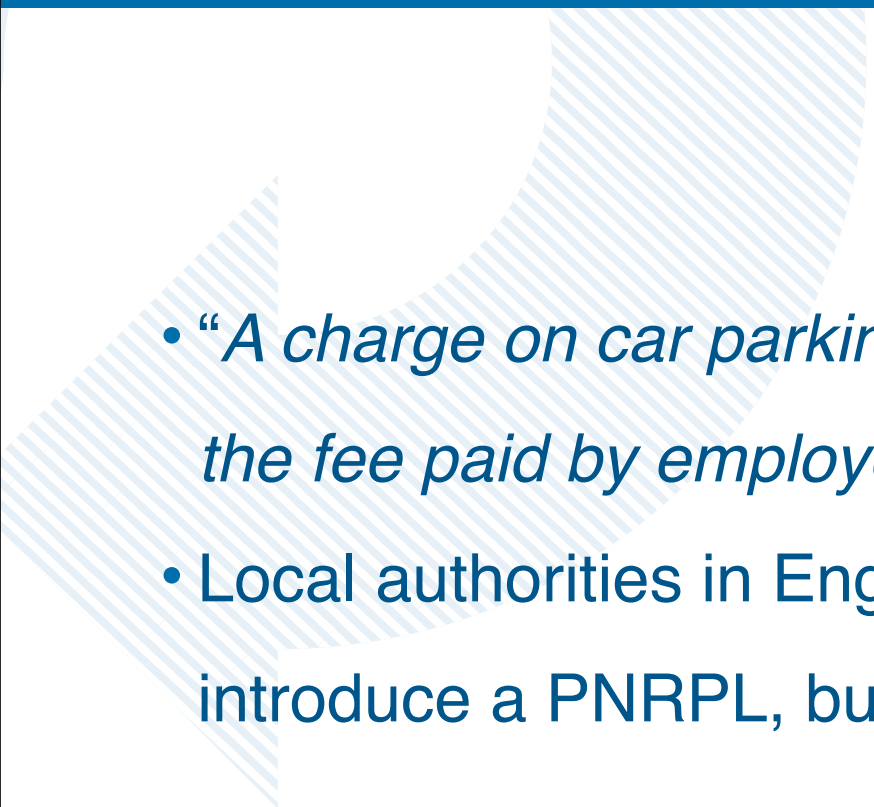


PERTH, AUSTRALIA, SUPPLY SIDE APPROACHES EXPANDING THE ROAD NETWORK & OPTIMISING

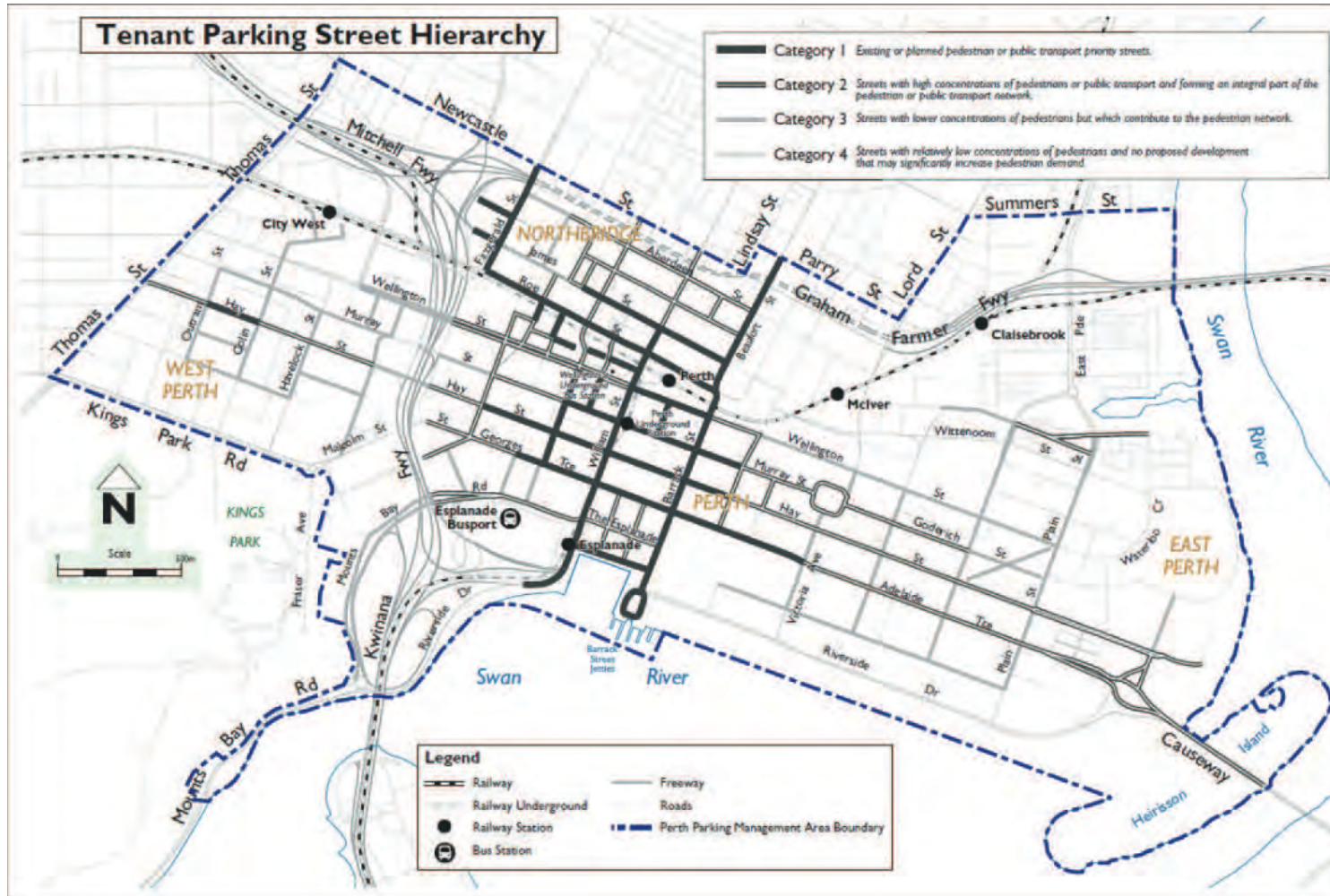


PRIVATE NON-RESIDENTIAL PARKING LEVIES

DEFINITIONS

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- *“A charge on car parking space within a designated area with the fee paid by employers to the local authority”.*
 - Local authorities in England and Wales can charge or introduce a PNRPL, but it is not yet allowed in Scotland.

CASE STUDIES PERTH AUSTRALIA



CASE STUDIES

PERTH AUSTRALIA

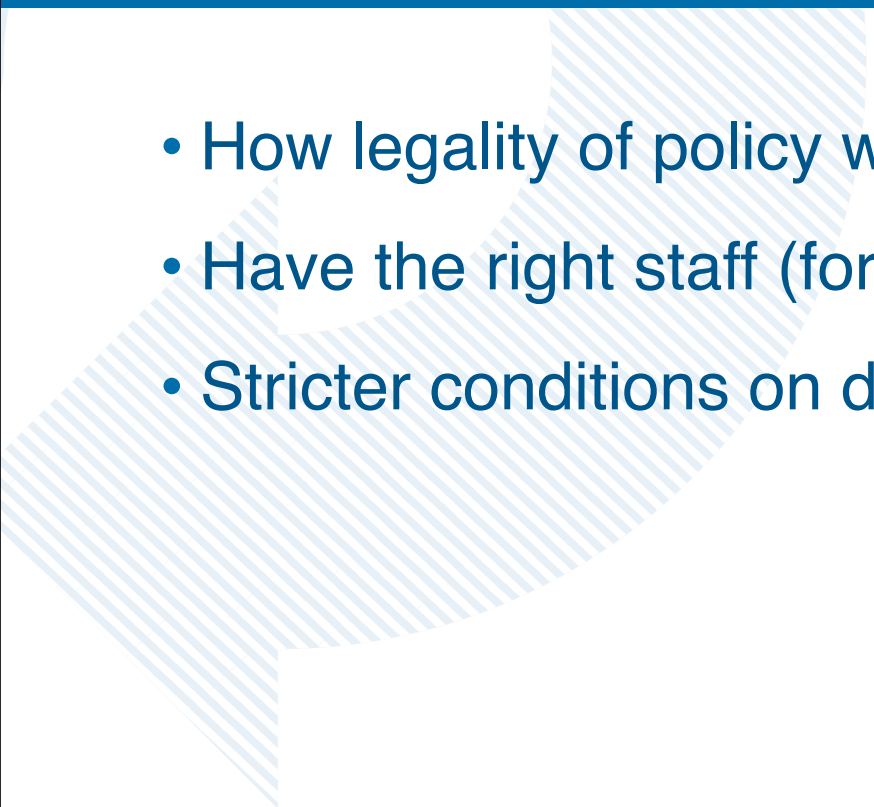
Perth – Parking Licence Fee² Boundary Area City Centre Implemented 1999 Approx Annual Revenue \$30M	Description All non residential parking bays that are in use. Exemption Disabled spaces Loading Bays Public service bays Businesses <6 space Spaces incidental to primary business activities.	• Reduce traffic congestion by inducing a shift from private car to other modes of transport. • Using funds from the scheme to provide a Central Area Transit bus system.	• Introduced for transport CAT bus system Free transit zone. • To manage traffic congestion on inner city streets as the city rapidly grows to improve amenity for residents, businesses and visitors to central Perth. • Improving inner city cycling facilities to meet the growing need for convenient, safe cycling routes, and helping to make cycling a safe and attractive alternative transport mode.
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CASE STUDIES

NOTTINGHAM UK

Scheme	Parking	Objectives	Revenue Uses
Nottingham – Workplace Parking Levy¹ Boundary Area City of Nottingham (administrative area of Nottingham City Council) Implemented 2012 Approx Annual Revenue £9M	Description Occupied private non-residential off street workplace parking. Exemptions Customers. Fleet vehicles. Emergency Services. Disabled Spaces Loading Spaces Employers with < 11 spaces. NHS or NHS Contractors delivering frontline services.	• Reduce Congestion. • Encourage modal shift to more sustainable modes. • Fund transport infrastructure. • Protect the city's commerce and inward investment. • Improve the city's environment and sustainability.	• Introduced for transport. • Light rail expansion. • Link bus services. • New fleet of 45 electric buses introduced. • Redevelopment of Nottingham Railway Station. • Implementation of a smart card initiative. <u>Support to businesses</u> • Workshops offering sustainable travel advice and information to staff employees; and • Grants schemes for employers for car park management and cycle facilities.

OPPORTUNITIES FOR IMPROVEMENT (PERTH)

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- A decorative graphic on the left side of the slide consists of several overlapping, semi-transparent shapes. These shapes are filled with a light blue diagonal line pattern and have a soft, feathered edge, creating a modern, abstract background element.
- How legality of policy was set out;
 - Have the right staff (for enforcing the scheme); and
 - Stricter conditions on developers.

GROUP DISCUSSION

What do you think about implementing PNRPLs in Scottish

EDINBURGH AS A CASE STUDY

Geography:

- Population: 482,000
- Busy and congested city centre with commuters driving from the outskirts and surrounding rural areas.

Management of Scheme:

- Likely to be managed by Local Authority in liaison with Transport Scotland.

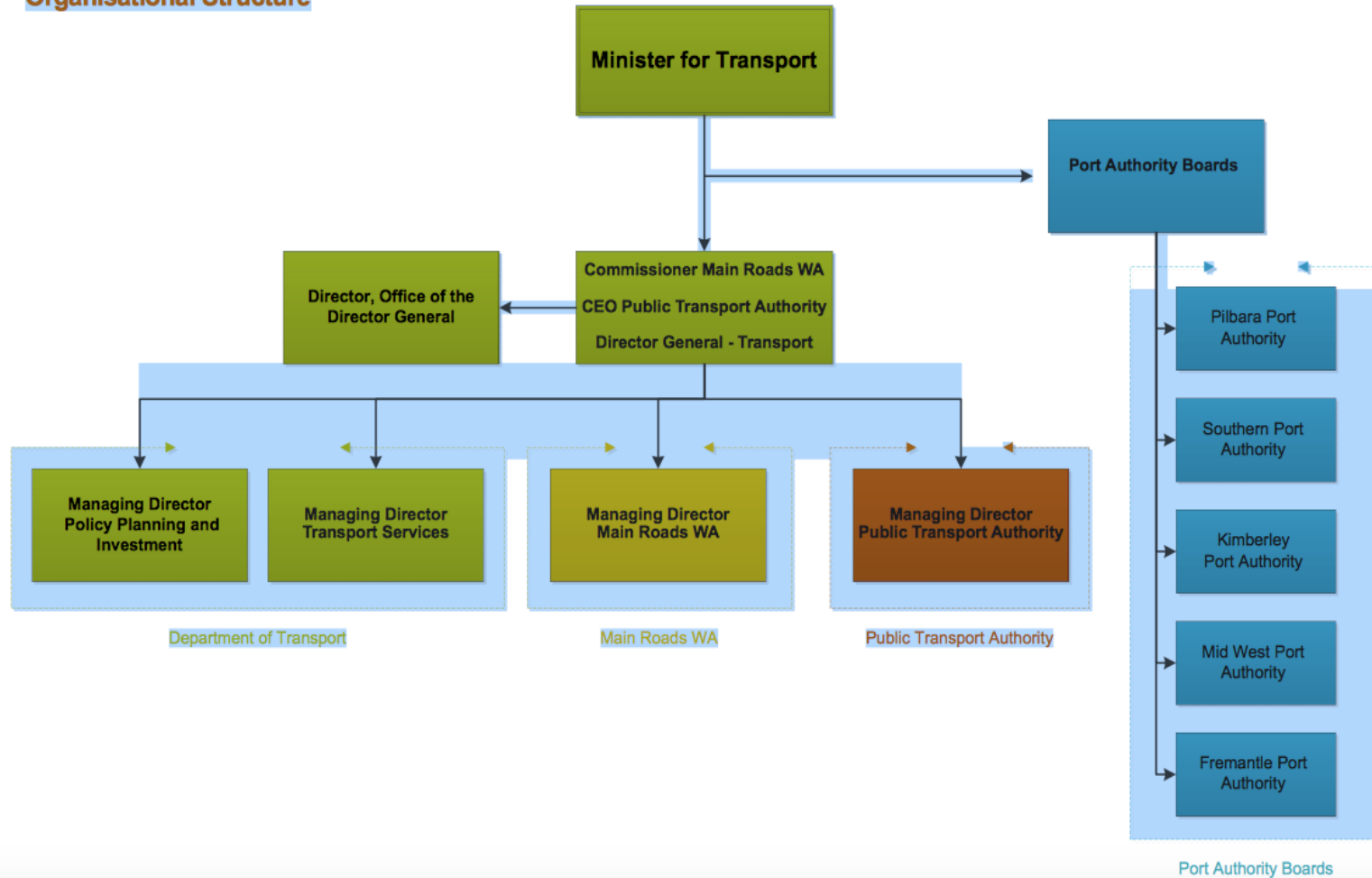
Legality:

- Scottish councils do not currently have the remit to implement PNRPLs.
- But under consideration in the current Transport Bill.

CASE STUDIES

PERTH AUSTRALIA MANAGEMENT STRUCTURE

Organisational Structure





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